

**REMARKS**

Reconsideration and allowance of this application, as amended, is respectfully requested.

This Amendment is in response to the Office Action dated November 3, 2004, the period for response for which extension is requested by the attached Petition for Extension of Time. Appreciation is expressed to the Examiner for the indication of allowable subject matter in claims 4 through 10.

By the present Amendment, independent claim 1 has been amended to clarify the invention, as will be discussed below.

Also, a new Abstract is provided herewith to define the invention in terms of a single paragraph. Accordingly, removal of the objection to the Abstract is respectfully requested.

In the drawings, Figure 18 has been labeled as prior art, as required on page 3 of the Office Action. Therefore, removal of the objection to Figure 18 is also respectfully requested.

Also with regard to the drawings, it is noted Figures 1, 4, 5, 8, 11, 12, and 19 have been objected to "because the Figures do not have element name labels associated with the numbers." With regard to this, it is Applicants understanding that this objection refers to the fact that written labels have not been provided within a number of the illustrated elements provided in these figures.

For example, in Figure 1, the mixers 101/102 are not verbally identified as mixers. Instead, a conventional symbol of an X for mixers is provided. Similarly, the low-pass filters 130/131 are not identified by a label as low-pass filters. Instead a conventional diagonal line from upper left corner is provided. In a similar manner,

rather than labeling the attenuators 103/104 verbally, they have been illustrated in a conventional form with a triangle having an arrow there through.

As such, although verbal labels have not been provided, it is noted that the various elements noted above, as well as other elements in the objected to figures, effectively identify their structure by virtue of symbols, rather than verbal terminology. It is respectfully submitted that one of ordinary skill in the art reviewing the above-noted Figures would clearly understand the elements involved by the various boxes, circles, etc. As such, it is respectfully submitted that the addition of verbal labels would merely complicate the drawing unnecessarily. Therefore, rather than unnecessarily complicate the drawings, reconsideration and removal of the objection to the Figures 1, 4, 5, 8, 11, 12 and 19 is respectfully requested on the basis that the illustrated elements are, in fact, clearly recognizable to those of ordinary skill in the art.

Reconsideration and removal of the 35 U.S.C. §103 rejection of Claim 1 as being unpatentable over Zamat (USP 5,896,421) in view of Yochem (USP 2002/0137487) is respectfully requested. With regard to this, it is noted that by the present amendment, independent Claim 1 has been amended to clarify that the outputs of the low-pass filters of the claimed direct-conversion transmitting circuit, (e.g., such as the low-pass filters 130/131 in Figure 1.) are directly connected to the inputs of the mixer circuits, (e.g., the mixers 101/102 of Figure 1), respectfully. This direct connection between the outputs of the low-pass filters and the inputs of the mixer circuits is extremely important since it provides an improved suppression of noise generated within the integrated circuit. In addition to the illustration of the direct connection between the outputs of the low-pass filters of 130/131 and the

inputs of the mixers 101/102 in the various figures (e.g., Figure 1, for example), this direct connection is also described on page 12, line 9 et seq. Specifically, as noted there:

The noise having a frequency equal to or more than a cutoff frequency  $F_{CUTOFF2}$  is damp by a low-pass filter having the output frequency  $F_{CUTOFF2}$  connected immediately before the mixers 101/102, as indicated in the rectangle 118 of Figure 1. . . .Therefore, it is possible to reduce the noise level in receiving band.

It is respectfully submitted that neither the primary reference to Zamat nor the secondary reference to Yochem teach or suggest this claimed direct connection. Quite to the contrary, the low-pass filters 56/58 in the primary reference to Zamat are not directly connected to the inputs of the mixers 66/70. Instead equalizers 60/62 are provided between the low-pass filters and the inputs of the mixers, Therefore, it is respectfully submitted that the present amended claim 1 and its dependent claims 2 and 3 clearly define over the cited primary reference to Zamat.

It is further respectfully submitted that the secondary reference to Yochem fails to provide any teaching at all which would lead one to modify Zamat to directly connect the outputs of low-pass filters to the inputs of mixer circuits, especially in the overall context of the present claims 1 through 3. Therefore, reconsideration and allowance of independent 1 and its dependent claims 2 and 3 is respectfully requested.

If the Examiner believes that there are any other points which may be clarified or otherwise disposed of either by telephone discussion or by personal interview, the Examiner is invited to contact Applicants' undersigned attorney at the number indicated below.

Application No.: 10/073,029  
Art Unit: 2685

Docket No. 843.41127X00  
Page 16

To the extent necessary, Applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to the Antonelli, Terry, Stout & Kraus, LLP Deposit Account No. 01-2135 (Docket No. 843.41127X00), and please credit any excess fees to such deposit account.

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By *Gregory E. Montone*  
*for* Gregory E. Montone #32,392  
Reg. No. 28,141

GEM/jjk/dks

1300 North Seventeenth Street, Suite 1800  
Arlington, Virginia 22209  
Telephone: (703) 312-6600  
Facsimile: (703) 312-6666

**AMENDMENTS TO THE DRAWINGS**

The attached sheet of drawing includes changes to the Figure 18. This sheet, which includes Figure 18, replaces the original sheet including Figure 18. In Figure 18, the label "Prior Art" is provided in accordance with the requirement to do so as set forth in the Office Action.